

# **Geography Curriculum**

### Aims

In a world with rapid technological development and global challenges, there is a constant need to be able to innovate, adapt, develop and behave as a collective humanity. To a much greater extent, students must acquire knowledge, skills, experiences, curiosity, ways of working, options for action, overview, values and attitudes, which they can use and enjoy in professional contexts and in their further lives as free citizens of society.

The subject of geography takes its starting point in the holistic presentation that characterizes the first school years. Knowledge of the earth, its diverse elements and environments begins with the child becoming familiar with his immediate surroundings in a combination of history, nature experience and social consideration. Little by little, the horizon is expanded to the whole of Denmark, the neighboring countries and our special part of the world, in order to eventually arrive at different forms of global overview and perspectives on the solar system and the cosmos.

In this context, the subject term Geography includes a large number of subject areas or individual subjects such as natural, cultural and political geography as well as geology with subdivisions of ethnography, meteorology, oceanography and astronomy. In addition, there are numerous overlaps with subjects such as history, social studies, physics and biology.

It goes without saying that not all the mentioned areas can be the subject of the same immersion. It will be clear from the subject plan below that there is a difference between the subject areas that are taught with the aim of a more detailed dissemination of knowledge and subjects where the aim is more knowledge of the existence and the challenges and limitations of the phenomena.

The choice of subjects and the degree of immersion therein is also subject to a great deal of freedom in this subject, albeit with certain obvious and central parts which, based on a pedagogical rationale, are given at certain grade levels.

Byens Steinerskole / Waldorf International School Copenhagen Otto Busses Vej 47, 2450 København SV kontor@byenssteinerskole.dk +45 71 96 70 52



The school's curriculum is structured to be a 12-year unit school, where 10th grade and Steiner-HF are a direct extension and extend beyond 9th grade and the progression of this curriculum. Thus, there are individual subject areas which are only deepened during the three higher grade levels (for example, the entire immersion in demography is in the 10th grade).

In addition to conveying basic knowledge about the earth's diverse natural environments as well as the opportunities and challenges these provide to a human culture, the subject is also highly suitable for creating genuine interest and enthusiasm for the world we live in. And through insight into the large contexts in the natural realms, a foundation is also laid for being able to deal creatively with the major ecological and climate problems we face today.

Before Class 4, geography is not explicitly taught but rather is immersed in classroom activities and field trips. There are more elements of geography in the teaching in Class 3 where both business geography or economy and rural/urban geography in a local historical perspective are an essential element.

Byens Steinerskole / Waldorf International School Copenhagen Otto Busses Vej 47, 2450 København SV kontor@byenssteinerskole.dk +45 71 96 70 52



## **Objectives and Final Goals of the Subject**

Investigation (I)

This includes skill and knowledge targets for science studies, demography, the Earth and its climate, natural conditions and living conditions as well as globalization

The teaching gives students the opportunity to

• design, implement and evaluate studies in geograph

Modelling (M)

This includes skill and knowledge targets for modeling, demography, the Earth and its climate, natural conditions and living conditions as well as globalization

The teaching gives students the opportunity to

• use and evaluate models in geography

Perspective (P)

This includes skill and knowledge targets for perspectives, demography, the Earth and its climate, natural conditions and living conditions as well as globalization

The teaching gives students the opportunity to

- gain perspective on geography's role in understanding the outside world
- relate the content of the subject to the development of scientific knowledge

Communication (C)

This includes skill and knowledge targets for communication, argumentation, using subject terms and being able to understand subject texts.

Byens Steinerskole / Waldorf International School Copenhagen

Otto Busses Vej 47, 2450 København SV kontor@byenssteinerskole.dk +45 71 96 70 52



The teaching gives students the opportunity to

• communicate about science subjects in geography

Byens Steinerskole / Waldorf International School Copenhagen Otto Busses Vej 47, 2450 København SV kontor@byenssteinerskole.dk +45 71 96 70 52



Development of the Subject			
Content and Focus	Objectives	Final Goals	
In Class 4, students start by observing, examining, measuring and mapping the classroom and the school yard. Later, they can go for walks in the local environment and observe what their home town and region looks like. Everything is described in words and especially in drawings. The students learn to observe their school, seen from above, their school road and what else is relevant to the school's location in relation to geography. The environs surrounding our school with the green area and our trip to Gronmose are used to create engaging and pictorial presentations. At the end of the period, maps are drawn with symbolic explanations, where the water is painted blue, the forests green, the field yellow, etc. These symbolic explanations are drawn on the side of the map. After the local geographic period, a national geographic period follows, which can be started with the formation of the Danish landscape during the Ice	The objectives: Investigation, Modelling , Perspective and Communication are trained here.	<ul> <li>Skill Objectives I:</li> <li>The teaching gives the student the opportunity to: <ul> <li>practically and theoretically examine populations, occupations and urban structures.</li> <li>perceive, examine and reproduce the topographic conditions of an area through self-experienced walks in the terrain</li> <li>perceive the immediate environment consciously and spatially</li> <li>examine and immerse oneself in ethnographic conditions and describe how a certain country or cultural area is connected to the natural conditions</li> <li>investigate and acquire knowledge about a defined geographical area (e.g. a country) using different source material</li> <li>empathize with foreign geographical conditions and parts of the world</li> <li>examine specific types of rock and types of landscape that you walk in, and, supplemented by map reading, from there give an idea of the formation and character of the landscape</li> </ul> </li> </ul>	

Byens Steinerskole / Waldorf International School Copenhagen Otto Busses Vej 47, 2450 København SV kontor@byenssteinerskole.dk +45 71 96 70 52



Age. During the period, an actual map of Denmark is drawn so that the students become familiar with the different parts of the country, and the most important cities and main industries in the parts of the country are reviewed. Alongside this work, the class deals with geographical definitions such as fjord, cove, peninsula, headland, promontory, etc.

#### Class 5

In Class 5 it is about Scandinavia, the Nordic countries and the Baltic and North Sea coasts. Sweden can be explored by reading *A Kid's Guide to Scandinavia and Finland* by Jack L. Roberts. All the countries' characteristic landscapes also show how and why people live in these particular places.

Trade, craft and industry are important elements that must be brought into connection with the countries' geographical location.

Questions about how wind and weather affect the different peoples and why people have chosen their particular profession are elucidated based on the geographical location and consequent necessity. The students now gain a closer knowledge of the terms such as rivers, streams, mountains, mountains, fjords, bays, lakes and what separates them. The largest • the importance of the natural basis for people's living conditions.

#### Knowledge Objectives I:

The teaching gives the student the opportunity to:

- acquire knowledge about a defined geographical area (e.g. a country) using specialist books, images and the internet and subsequently communicate their research both orally to an audience and in writing.
- know the most important cities, main industries, landscape types, creeks/rivers, mountains and waters in the Nordics and Europe.

#### Skill Objectives M:

The teaching gives the student the opportunity to:

- acquire knowledge about a defined geographical area (e.g. a country) using specialist books, images and the internet
- communicate their research both orally to an audience and in writing.
- know the most important cities, main industries, landscape types, creeks/rivers, mountains and waters in the Nordics and Europe.
- use thematic maps including digital maps to describe production, consumption, differences between poor and poor countries.

Byens Steinerskole / Waldorf International School Copenhagen Otto Busses Vej 47, 2450 København SV kontor@byenssteinerskole.dk +45 71 96 70 52



cities, lakes, seas and their locations, flags, languages and special cultural differences are learned. Students learn to draw more and more accurate maps, as well as paint elaborate maps and different geographical areas. Only later at this grade level is a search for countries and areas in an atlas.

#### Class 6

The purpose of the geography lessons in Class 6 is to move the students away from their domestic conditions and get them interested in foreign geographical conditions and parts of the world.

This world geography usually begins with a period in zone geography, where the main emphasis is placed on the contrast between the cold and the warm zone. Basically, it must be an experience of the climatic conditions for plant life, animal life and human life in the different zones. This is done through vivid and pictorial depictions of living conditions in other climate zones, where students gain insight into and an experience of people's way of life, culture and economy from the perspective of climate and geographical location.

The students' own work is mainly in the drawing/painting and in the written description. It is essential to immerse oneself in a quality of

- orient oneself in atlases and other geographical reference works in a qualified manner
- use digital aids in independent studies and be able to
- read different models with demographic, meteorological and zonal geographical conditions
- read different geographical models for rainfall, temperature, vegetation and occupational distribution

#### Knowledge Objectives M:

The teaching gives the student the opportunity to:

 have an overview of Europe's countries, capitals, mountains and plains, culture etc. with its manifold differences as well as an understanding of the European whole

#### Skill Objectives P:

The teaching gives the student the opportunity to:

- have an overview of Europe's countries, capitals, mountains and plains, culture etc. with its manifold differences as well as an understanding of the European whole
- compare and analyze population and business development in different countries as well as perspectives for sustainable development
- examine and immerse oneself in ethnographic conditions and describe how a certain country or cultural area is connected to the natural conditions

Byens Steinerskole / Waldorf International School Copenhagen Otto Busses Vej 47, 2450 København SV kontor@byenssteinerskole.dk +45 71 96 70 52



presentation rather than systematic overviews. Description of contrasts between heat and cold could be in a description of Greenland and Africa as two opposite poles. Students could tell about Knud Rasmussen's travels in Greenland and Livingstone and Stanley's travels in Africa. The meaning of solar altitude as well as the concepts zenith and nadir, equator, tropic circles and polar circles are important concepts to review in this connection.

The geography of Europe is also a theme in Class 6, where students can follow some of the big rivers in Europe and in this way visit different countries. Gradually, emphasis is placed on the appearance and wholeness of this part of the world. The individual countries and the many peoples make up an extremely varied picture, which requires time to be described, especially so that the students can gain a greater understanding of Europe as a whole.

During the period, each student chooses a European country to investigate and immerse themselves in, about which they write an independent assignment. The task is then presented to the class. In connection with this period, when the most important rivers, cities, mountains are assumed to be learned beyond all the European countries. Sources such as thatquiz.org and various digital maps and theme pages are a good aid. Knowledge Objectives P:

The teaching gives the student the opportunity to:

- know about zone geography and its importance for the living conditions of plants and people
- have an overview of Europe's countries, capitals, mountains and plains, culture etc. with its manifold differences as well as an understanding of the European whole
- show and describe important minerals and rock types and know their origin

Skills and Knowledge Objectives C:

The teaching gives the student the opportunity to:

- focus on suitable methods for communication and assessment of science subjects.
- focus on the formulation and assessment of scientific justifications and claims.
- focus on the use of professional language in the work with and dissemination of the natural sciences.
- focus on the acquisition of science knowledge through reading and writing.

Byens Steinerskole / Waldorf International School Copenhagen Otto Busses Vej 47, 2450 København SV kontor@byenssteinerskole.dk +45 71 96 70 52



		1
An example could be night images with lighting as a		
basis for discussions of population distribution.		
In Class 6, the actual geography is supplemented by a geological period, which is based on the Earth's creation from a natural scientific point of view. In addition, students learn about basic plate tectonics as a background for mountain chain formation, igneous and metamorphic rock types and erosion and weathering as a background for sedimentary rock types. In addition, the curriculum from Class 4 is refreshed and expanded with the landscape-forming effects of ice such as ice caps, glaciers etc. The period ends with a one-week camp school on Bornholm, where the teaching material is sought to be made concrete in the landscape based on the students' field investigations of rock types and landscape forms.		
Class 7 The aim of the geography teaching in Class 7 is for the students to get to know all the parts of the world and the oceans that separate them. In connection with the teaching of history and especially the great explorers, it is obvious to link the teaching of geography to this subject area.	The objectives: Investigation, Modelling , Perspective and Communication are trained here.	<ul> <li>Skill Objectives I:</li> <li>The teaching gives the student the opportunity to:</li> <li>formulate and investigate a limited problem with science content, including collecting and evaluating data from own and others' studies in science, as well as concluding and generalizing on the basis of own and others' practical and investigative work.</li> </ul>

Byens Steinerskole / Waldorf International School Copenhagen

Otto Busses Vej 47, 2450 København SV

kontor@byenssteinerskole.dk +45 71 96 70 52



Students must be able to know and draw the contours of land formations and be able to use this as a key to understanding the characteristics of the different continents.

Digital quizzes are recommended for learning the most important countries, cities, rivers and mountains, as well as expanding knowledge of models and thematic maps in atlases, specialist books and online.

As in Class 6, the students in 7th grade have an independent task. At this grade level, for example, it can be an ethnographic assignment, where each student must choose a current or former naturalist, seek knowledge about this person's conditions of existence and his or their connection with climate, the country's appearance, access to the sea, vegetation, wildlife, religion, resource problems and conditions to the surrounding communities. The assignment is submitted in writing and presented to the class and possibly the parents.

Class 7 includes a period of astronomy, where through studies of the sun's daily and annual movements, a stronger understanding of the changing seasons in the different geographical zones is further developed. Students will be introduced to the phases of the moon, the difference between ebb and flow, solar and lunar eclipses, the zodiac and the main constellations of the  have knowledge of the application possibilities and limitations of research methods, including the collection and validation of data as well as criteria for evaluating research in natural sciences.

Demography, the Earth and its climate, natural conditions and living conditions as well as globalization The teaching gives the student the opportunity to:

- investigate and acquire knowledge about a defined geographical area (e.g. a country) using different source material
- empathize with foreign geographical conditions and parts of the world
- examine specific types of rock and types of landscape that you walk in, and, supplemented by map reading, from there give an idea of the formation and character of the landscape and
- the importance of the natural basis for people's living conditions.
- know all the continents of the earth and the oceans that separate them
- know the most important countries, cities, rivers, mountain ranges and plains in the world
- know about the overall population and occupational distribution and development in the world
- acquire knowledge about a defined geographical area (e.g. a country) using specialist books, images



northern hemisphere. In addition, students investigate the eight planets and their main movements and rhythms, as well as shooting stars and other observable celestial phenomena. A depiction of past understanding of solar systems is important. Therefore, the astronomy period contains depictions of Copernicus and his heliocentric interpretation of the planetary loops, as well as Brahe, Kepler and Galileo.

Additionally, this topic can also be linked to a historical period, if this is deemed more appropriate.

#### Class 8

In Class 8, the subjects are meteorology and oceanography. A teaching in the course may, for example, include topics such as the sun's differential heating of the earth, sea and land breezes, cold and warm air and the connection with wind, the division of the atmosphere, the formation of clouds, beings and names, the Beaufort scale, weather observations and charts, high and low pressure, the Earth's large wind systems, the water cycle and the large ocean currents, tornadoes and hurricanes, pressure conditions at altitude and wind over mountains, warm and cold fronts, low pressure migrations, equatorial high pressure belt, chill factor, the Coriolis effect, the jet layer, etc. and the internet as well subsequently convey their research both orally to an audience and in writing.

 know the most important cities, main industries, landscape types, creeks/rivers, mountains and waters in the Nordics and Europe.

#### Skill Objectives M:

The teaching gives the student the opportunity to:

- use purpose-relevant models to explain phenomena and problems in science, with an understanding of the applicability and limitations of the individual methods.
- have knowledge of modeling, the structure of selected models and their advantages and disadvantages.

Demography, the Earth and its climate, natural conditions and living conditions as well as globalization The teaching gives the student the opportunity to:

- explain how the Earth's wind belts and directions arise as a combination of the Coriolis effect and the temperature difference between the equator and the poles.
- outline how the heat transport of the earth's internal energy, coupled with gravity, leads to the movement of mass that causes continental drift and the earth's magnetic field.

Byens Steinerskole / Waldorf International School Copenhagen Otto Busses Vej 47, 2450 København SV kontor@byenssteinerskole.dk +45 71 96 70 52



In connection with this period, it is obvious to let the students do as many experiments, investigations and observations as possible either individually or as class experiments, just as daily readings from a weather station and representations of the development of the weather in various models such as graphs, diagrams and tables can be a part of the teaching.

In Class 8, the students are presented with a two-month independent assignment entitled "Product assignment". In this, the students have to deal with products, and as part of this, the path of consumer goods from resource to store and the global product cycles, which most western products are part of in one way or another, are included.

#### Class 9

In Class 9, work is done with the earth's geological structures and processes as well as landscape-forming processes. Here we work with an understanding of the earth's structure and dynamics, based on the historical development of the earth's composition and present-day assumptions about the earth's development history, the internal dynamic processes and structures. The foundation of the geology department and development is illuminated by reviewing a number of biographies and the importance

- explain the processes in the geological cycle that underlie the igneous, sedimentary and metamorphic rock types, and recognize selected representatives of these.
- orient oneself in atlases and other geographical reference works in a qualified manner, include digital aids in independent studies and be able to read different models with demographic, meteorological and zonal geographical conditions
- know and draw the outline of the continents and use them as a key to understanding the characteristics of the different continents
- describe the landscape formation processes that can be expected at a flatland glacier and recognize the landscape types in representative Danish areas.
- review how water through erosion, sediment transport and deposition shapes the coastal landscape and lowland areas.
- know about the formation of the Ice Age landscape in Denmark
- know the connections between plate tectonics and mountain chain formation, volcanism and earthquakes

Skill Objectives P:

The teaching gives the student the opportunity to:

Byens Steinerskole / Waldorf International School Copenhagen Otto Busses Vej 47, 2450 København SV kontor@byenssteinerskole.dk +45 71 96 70 52



of the individuals for the changing worldview. Steno, Werner, Guettard, Agassiz and Wegener can be examples of this.

Plate tectonics is elaborated and seen in a historical process, and volcano formation, earthquakes, tsunamis are illuminated. The development of the seismograph and the warning options before a disaster are linked with the greater understanding of the Earth's geological processes and composition. The teaching is concretized in examples of how landscapes are shaped and changed over time, sometimes suddenly while other times imperceptibly, but persistently over millions of years. We work here with an understanding of the forces that have shaped the continents, the traces of the glaciers in the landscape and the continuous erosion and deposition that takes place every single day. The students work with the topics in the form of presentations from the teacher, searches including video clips from the internet and their own illustrations.

In connection with the geology period, the class is on a one-week trip to Iceland, where they hike in a "prehistoric" landscape with basalt, geysers, glaciers, hot springs and lava fields. On this tour, the entire period's themes are visualized.

- use general models to describe conditions in the immediate environment, shed light on societal issues and contextualize scientific arguments.
- have knowledge of relevant current scientific issues, conflicts of interest, sustainable development and the development of scientific statements.

Demography, the Earth and its climate, natural conditions and living conditions as well as globalization The teaching gives the student the opportunity to:

- understand the problems surrounding raw materials, and man's influence on the water and carbon cycle.
- explain and assess consequences for the natural environment, outline / act / solution options
- and to differentiate between them
- know about the most important environmental and resource issues as well as the greatest demographic issues
- know the connections between plate tectonics and mountain chain formation, volcanism and earthquakes
- show and describe important minerals and rock types and know their origin
- focus on suitable methods for communication and assessment of science subjects.
- focus on the formulation and assessment of scientific justifications and claims.

Byens Steinerskole / Waldorf International School Copenhagen Otto Busses Vej 47, 2450 København SV kontor@byenssteinerskole.dk +45 71 96 70 52



In Class 9, we also work with sustainable farming and agriculture as a profession. The students are on a one-week stay on an organic/biodynamic farm, where they gain experience working in the fields, greenhouse, henhouse and in the packing plant and gain insight into sustainable agriculture and knowledge of, among other things, crop rotation, fertilizer and balance between the number of animals and plant areas.

- focus on the use of professional language in the work with and dissemination of the natural sciences.
- focus on the acquisition of science knowledge through reading and writing.

Byens Steinerskole / Waldorf International School Copenhagen Otto Busses Vej 47, 2450 København SV kontor@byenssteinerskole.dk +45 71 96 70 52